

WHAT IS CLAIMED IS:

1. A hydrostatic axial piston machine, comprising:
a swashplate;
a cylinder block;
a cylinder block bearing system;
a brake configured to arrest the cylinder block; and
a compensation device configured to at least partially relieve the cylinder block bearing system from axial engine forces, wherein the compensation device is integrated into the brake.

2. The hydrostatic axial piston machine as claimed in claim 1, wherein the brake includes a brake piston that is loaded by a spring in a closing direction of the brake, and wherein the brake piston has a relieving surface which can be pressurized by hydraulic pressure and acts in an opening direction of the brake and is effective opposite to the axial engine forces.

3. The hydrostatic axial piston machine as claimed in claim 2, wherein the cylinder block bearing system includes two helical roller bearings in an O-arrangement, wherein the roller bearings are fastened in a housing that surrounds the cylinder block, wherein the brake piston is an annular piston located axially between the helical roller bearings, wherein a retaining ring of the spring is supported on an inner ring of one of the helical roller bearings provided to absorb axial engine forces, and wherein the brake piston at maximum deflection contacts the retaining ring.

4. The hydrostatic axial piston machine as claimed in claim 1, wherein the brake is a wet, multiple-disc brake.

5. The hydrostatic axial piston machine as claimed in claim 2, wherein the axial piston machine is located in a hub drive, wherein the housing forms a stationary hub carrier, the cylinder block forms a rotating hub, and the cylinder block bearing system forms a hub bearing system.

6. The hydrostatic axial piston machine as claimed in claim 5, wherein the cylinder block includes a wheel fastening flange and a rim centering device.

7. The hydrostatic axial piston machine as claimed in claim 5, wherein the swashplate is located and oriented such that radial engine forces under operating conditions are active opposite to the forces acting from outside on the cylinder block bearing system.

8. The hydrostatic axial piston machine as claimed in claim 5, wherein the hub drive is a wheel hub drive.

9. The hydrostatic axial piston machine as claimed in claim 6, wherein the swashplate is located and oriented such that radial engine forces under operating conditions are active opposite to the forces acting from outside on the cylinder block bearing system.

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